

REMARKS

The specification has been reviewed, and clerical errors of the specification have been amended.

In paragraph 2 of Action, claims 1-4 were rejected under 35 U.S.C. 102(b) as being anticipated by King. In paragraph 4 of the Action, claims 1, 5 and 6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose in view of King.

In view of the rejections, claims 1 and 3 have been amended, and new claims 7-9 have been filed.

As clearly recited in amended claim 1, a sheet processing apparatus of the invention folds a sheet bundle at a predetermined position. The apparatus comprises pressing means for pressing a predetermined position of the sheet bundle to fold the sheet bundle, and paired rotating bodies for folding the sheet bundle supplied by the pressing means. The paired rotating bodies have nip portions contacting the sheet bundle.

In the invention, the nip portions have a high friction coefficient region and a low friction coefficient region less than the high friction coefficient region in friction coefficient. The high and low friction coefficient regions are made of different materials. Thus, a pulling force of the rotating bodies to pull the sheet bundle pressed into the nip portions of the rotating bodies by the pressing means has an amount which does not separate a sheet of the sheet bundle contacting the rotating bodies from subsequent sheets in the sheet bundle when pulling the sheet bundle.

Namely, in the invention, the nip portions have high and low friction coefficient portions made of different materials. Thus, when the sheet bundle is folded by the rotating bodies, the sheet bundle nipped by the rotating bodies does not substantially skew, and can be properly folded.

In King cited in the Action, a sheet is folded by parallel folding rollers 10, 11. Each folding roller includes extensions 14 with maximum diameter, and extensions 15, 18 with reduced

diameters. When the parallel folding rollers 10, 11 are set for use, the extensions 14 contact each other, while spaces are formed at the extensions 15, 18. When the sheet is nipped between the folding rollers 10, 11, the sheet is strongly held between the extensions 14, while the sheet is not held between the extensions 15, 18 or held with less force. Thus, the sheet is not folded or pulled with an equal pressure or force. Also, the transfer force of the sheet by the rollers is partly different. Accordingly, the sheet may be skewed and transferred with a crooked posture.

In the invention, the nip portions have a high friction coefficient region and a low friction coefficient region less than the high friction coefficient region in friction coefficient. In King, the folding rollers 10, 11 have extensions 14, 15, 18 with different diameters, wherein when the extensions 14 on the folding rollers 10, 11 contact each other, the extensions 15, 18 have spaces therebetween. When one of the folding rollers 10, 11 is considered, there is no high or low friction coefficient region. The friction coefficient in the folding roller 10 or 11 is constant throughout the entire area thereof. In the invention, one nip portion has the high and low friction coefficient regions.

In the invention, the high and low friction coefficient regions are made of different materials. In King, the folding rollers 10, 11 are made of the same material. Therefore, in King, there is no high and low friction coefficient regions made of different materials.

In the invention, a pulling force of the rotating bodies to pull the sheet bundle pressed into the nip portions of the rotating bodies by the pressing means has an amount which does not separate a sheet of the sheet bundle contacting the rotating bodies from subsequent sheets in the sheet bundle when pulling the sheet bundle. In King, the amount of the pulling force by the rollers 10, 11 is not considered at all.

In the invention, the friction between the sheet and the low friction region is reduced without changing the diameters of the

rollers, so that the sheet can be folded and transferred smoothly. In King, since the diameters of the folding rollers are partly changed, the sheet may be skewed, so that the sheet may not be folded and transferred smoothly.

Therefore, the features of the invention are not disclosed or suggested in King.

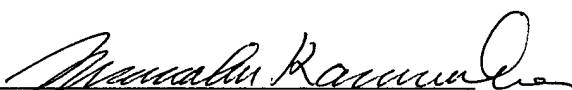
In Hirose, a sheet finisher includes a press roller pair 15, which presses and folds the sheet stack 34. Hirose does not explain the detailed structure of the roller pair 15. Therefore, it is assumed that the roller pair 15 is made of the same material throughout the entire area thereof. Therefore, there are no high and low friction coefficient regions in the roller pair of Hirose, which are the features of the invention.

As explained above, the cited references do not disclose or suggest the features of the invention now claimed. Even if the cited references are combined, the present invention is not obvious from the cited references.

Reconsideration and allowance are earnestly solicited.

Respectfully Submitted,

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